OLIGOSITA AMERICANA ASHMEAD SPECIES NOVA, A NEW CHALCIDOID OF THE FAMILY TRICHOGRAMMIDAE FROM ILLINOIS.

BY A. A. GIRAULT, UNIVERSITY OF ILLINOIS.

I HAVE been requested to draw up the following description of a species of Trichogrammidae, which, though undescribed, has been mentioned in the literature for several years past, in fact as far back as 1903. It is the first species of the genus *Oligosita* Haliday (Walker) to be described from North America and is parasitic on jassid eggs, as will be shown later. In 1903, Professor F. M. Webster published a brief paper entitled *Some Insects Inhabitants of the Stems of Elymus canadensis* (Webster, 1903 *a*) in which it is stated in regard to this species:

"**Oligosita americana* Ashmead MS. nov. sp. Also reared from same species of grasses from Princeton, Ind., and in connection with *Eurytomocharis eragrostidis* Howard, at Urbana. This is the first time this genus has been recorded in America."

The species is marked with an asterisk to show that it also was reared from *Elymus virginicus* and the original rearings were made at Urbana and Champaign, Illinois, in connection with studies on species of *Isosoma* inhabiting the stems of various grains and grasses. In this way, the parasite became connected with *Isosoma* as host, and in the same year, Webster (1903 *b*) recorded it definitely from the eggs of *Isosoma hordei* (Harris) in these words: "There is little doubt that *Oligosita americana* Ashm. and *Polyneura citripes* Ashm.[1] both attack and destroy the eggs, as I have reared them in numbers from stems of Elymus inhabited by the larvae, and also the stems of other grasses inhabited by other Isosoma larvae." (p. 33). Webster adds further, in connection with *Isosoma grande* (Riley), "not with certainty from *Isosoma grande* Riley," and also he indicates it to be an egg-parasite of *Isosoma tritici* (Fitch) and *I. captivum* Howard. The hosts of the parasite were therefore listed in accordance with the foregoing by Girault (1907). So far as I am able to find, it has not been mentioned again in the literature.

Recently, I have been informed by Mr. R. L. Webster of Ames, Iowa, who reared the species at Urbana, Illinois in 1905 from the eggs of a jassid determined by Herbert Osborn as being those probably of *Dorycephalus platyrhynchus* Osborn, that its previous record from the eggs of species of *Isosoma* by the elder Webster (1903;

[1] *Polynema citripes* Ashmead, a *nomen nudum*.

Girault, 1907) was based on error, the eggs of the jassid being found in the stems of Elymus along with the Isosoma larvae. Mr. Webster was kind enough to allow me to incorporate herewith the substance of a note which he had drawn up for publication with the view of rectifying matters. In this note, he states in part:

"In the spring of 1905 I reared this same species from jassid eggs deposited within the stems of *Elymus* found near Urbana, Illinois, on April 1, 1905. The jassid eggs were found while splitting stems of *Elymus* for larvae of *Isosoma*. The stems containing the jassid eggs was placed in a vial for further developments and on May 27th, 1905, the parasites emerged in abundance. Nearly every egg was parasitized.

Specimens were sent to Washington and the species was determined as *Oligosita americana* Ashmead MS. The jassid eggs were sent to Professor Herbert Osborn who replied that the eggs 'looked very much like those of *Dorycephalus platyrhynchus* Osborn, and if occurring in *Elymus* I should think probably that species.' According to Dr. Ashmead, another species of this genus is also parasitic on jassid eggs. From this, it would appear that *Oligosita americana* is to be regarded as a parasite of jassid eggs rather than on those of the genus *Isosoma*."

As a matter of general principle, I am greatly opposed to accepting names of species proposed in a manner similar to this, for they are merely *nomina nuda*; I therefore accept this name under protest and use it as a matter of expediency only, — tending to avoid confusion — on account of the fact that it has slipped inadvertently into the literature. The habit which prevails in Entomology of using manuscript names is a bad one; they are very liable to become obstructions, hence should be avoided. The usage seems to have been most prevalent in connection with the parasitic Hymenoptera, and it is not a difficult matter to point to many examples now existing in the literature, where the names alone exist, the description of the species having been subsequently neglected, or entirely overlooked.

Family TRICHOGRAMMIDAE.

Subfamily OLIGOSITINAE.

Genus *Oligosita* Haliday (Walker).

Oligosita americana Ashmead species nova.

Webster, 1903*a*, p. 92.
Idem, 1903*b*, pp. 22, 33.
Girault, 1907, p. 32.

Normal position.

Female: Length, 1.0 mm., average; moderate for the subfamily; visible to naked eye.

General color pallid lemon yellow, uniform; apical tarsal joint dusky; venation concolorous; legs and antennae pallid, with some silvery; wings hyaline, with the exception in the fore wing of a minute, but distinct, usually ovate but variable, fumated spot or dot projecting caudad (and slightly proximad) from the caudal apex of the stigmal vein, and embracing its knob. Abdomen with three conspicuous dusky bands encircling its center, all interrupted at the meson dorsad, the interruption broadest in the cephalic band, the caudal band of the three not very widely interrupted; these bands are along the caudal margins of the 4th, 5th and 6th abdominal segments and are less distinct ventrad. Ocelli and eyes deep red; mandibles fuscous.

Body impunctate, the vertex and dorsal aspect of the thorax delicately longitudinally striate, the abdomen showing distinct polygonal reticulation, which gives the appearance of longitudinal striation and sealiness. The striation of the vertex and thorax is fine.

Fore wings mostly without discal cilia, excepting in the apical fourth where they are not dense; the ciliate area is irregular, extending proximad to a point opposite the proximal end of the marginal vein in the caudal third of the wing, not near the caudal margin, in a line of paired setae, and again farther cephalad, spreading irregularly to the knob of the stigmal vein; there are also one or two scattered setae proximad of the stigmal knob, caudad of the marginal vein; discal cilia not arranged in regular rows. Apex of fore wing regularly, symmetrically rounded, the postmarginal vein absent, the stigmal vein short, thickened distad to form a triangular knob, the apex of which is obliquely truncate; stigmal vein forming a curved continuation of the marginal vein, the angle formed by them obtuse; marginal and submarginal veins long, subequal, the former thicker. Marginal cilia of the fore wing longest distad, the longest cilia not more than two-thirds the greatest width of the wing, which is at the distal fourth distant from the venation. Body of hind wing linear, with one principal longitudinal row of discal cilia, excluding the single row near the cephalic margin running along the bases or insertions of the marginal cilia; the usual row of discal cilia near the caudal wing margin obsolete. Marginal cilia of the cephalic margin of the hind wing short and delicate, but distinct, those of the caudal margin long and strong, about equal in size to the largest marginal cilia of the fore wing and distinctly twice longer than the greatest width of the hind wings.

Eyes coarse; ocelli in an acute-angled triangle in the center of the vertex, dis-

tant from the eye margins, the caudal ocelli slightly farther apart than either is from the respective eye margin or from the cephalic ocellus.

Legs normal, the intermediate tarsal joint of the intermediate and caudal legs slightly the shortest, the proximal and distal joints subequal; proximal and intermediate tarsal joints of the cephalic legs subequal, slightly shorter than the distal joint. Spurs inconspicuous, excepting on the caudal tibiae, single. Mandibles apparently tridentate, the two outer (lateral) teeth largest, subequal.

Antennae 7-jointed, with a single ring-joint, a 1-jointed funicle and a 3-jointed club, clothed with moderately long, sparse setae. Scape slightly convexed ventrad, somewhat longer than the pedicel, ring-joint and single funicle joint combined, subequal in length to the club; pedicel obconic, longer than the funicle joint or any of the club joints; ring-joint minute, transverse; funicle joint longer than wide, oval, longer than either of the club joints, excepting the distal one; the 3-jointed club ovate, the proximal and intermediate joints subequal in length, the intermediate joint widest, the distal joint slightly the longest, conical, intermediate in length between the funicle joint and the pedicel.

Abdomen moderately stout, longer than the thorax, ovate; ovipositor not exserted.

(From 5 specimens, $\frac{2}{3}$-inch objective, 1-inch optic, Bausch and Lomb.)

Male: Unknown.

Described from five females mounted in balsam received from Mr. R. L. Webster, Iowa State College of Agriculture and Mechanic Arts, Ames, Iowa, and labelled as follows: "*Oligosita americana* Ashmead MS. Urbana, Illinois, 1 April, 1905; emerged 27th May, 1905. R. L. Webster." The specimens were described while mounted in balsam; the character of the sculpture, however, was obtained afterwards by clearing in xylol, then remounting in xylol-balsam for permanent preservation.

Type: Accession No. *41078*, Illinois State Laboratory of Natural History, Urbana, Illinois, 5 ♀'s in xylol-balsam (1 slide).

There are but three other species of the Genus *Oligosita* now known, all European, the second described species — *subfasciata* Westwood — having been removed in 1904 by Ashmead to form the type of the genus *Westwoodella* Ashmead. The three remaining European species are *collina* Haliday (Walker), *nodicornis* Westwood and *staniforthii* Westwood. The hosts of these species are as yet unknown and nothing is known concerning the biology of any species of the genus.

Literature Referred To.

1903. *a*. Webster, Francis Marion. Some insect inhabitants of the stems of Elymus canadensis. Proceedings of the fifteenth annual meeting, association of economic entomologists, Washington, D. C., Dec. 27, 1902. Bull. No. 40, new series, Division Ent., U. S. Dep. Agric., Washington, D. C., p. 92.

b. Idem. Bull. No. 42, Division Ent., U. S. Dep. Agric., Washington, D. C., pp. 22, 33.

1907. Girault, Alecandrè Arsène. Hosts of insect egg-parasites in North and South America. Psyche, Boston, Massachusetts, XIV, p. 32.

NOTES ON THE EARLY STAGES OF DEILEPHILA INTERMEDIA.

BY ALLYN COX, WINDSOR, VT.

The eggs, laid June 17th, were small, oval, and green, turning dirty white before hatching.

Three caterpillars hatched in six days, two dying almost immediately. The remaining caterpillar was whitish, growing greener as it ate. It did not eat the shell, but attacked the leaves immediately. It had whitish lines between the segments, a fold of whitish skin behind the head, and a short whitish horn. The setae were invisible to the naked eye and the horn nearly so. It was about three sixteenths of an inch long. It spun threads of silk as it crawled. It ate evening primrose and wild grape, and ate small round holes in the leaves.

The first molt came in four days and the caterpillar was much more gaudy than before. The dorsum was blue-green with whitish green subdorsal lines. The sides were yellow-green with black spiracles. The venter was blue-green and the legs and props yellow-green. The head was small, round, bright green, and still had a fold of whitish skin behind it. In this molt the larva ate from the sides of the leaves.

The second molt came in nine days. The dorsum was blue-green, the sides were yellow-green granulated with white, and the venter was blue-green. There was a greenish white dorsal line and greenish white subdorsals which had on each segment a bright yellow dot. The stigmatal line was light green, but on the first two segments